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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,962	10/18/2000	Bore Klemets	AN05975/315IPIUS	3234
7590	04/09/2003			
Lainie E Parker Akzo Nobel Inc Intellectual Property Department 7 Livingstone Avenue Dobbs Ferry, NY 10522-3408			EXAMINER FORTUNA, JOSE A	
			ART UNIT 1731	PAPER NUMBER 14
			DATE MAILED: 04/09/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <b>09/691,962</b>	Applicant(s) <b>Klemets et al.</b>
	Examiner <b>José A. Fortuna</b>	Art Unit <b>1731</b>
<i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i>		
<b>Period for Reply</b> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.		
<ul style="list-style-type: none"> <li>- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>		
<b>Status</b>		
1) <input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>Mar 24, 2003</u>		
2a) <input checked="" type="checkbox"/> This action is FINAL.      2b) <input type="checkbox"/> This action is non-final.		
3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.		
<b>Disposition of Claims</b>		
4) <input checked="" type="checkbox"/> Claim(s) <u>1-23</u> is/are pending in the application.		
4a) Of the above, claim(s) _____ is/are withdrawn from consideration.		
5) <input type="checkbox"/> Claim(s) _____ is/are allowed.		
6) <input checked="" type="checkbox"/> Claim(s) <u>1-23</u> is/are rejected.		
7) <input type="checkbox"/> Claim(s) _____ is/are objected to.		
8) <input type="checkbox"/> Claims _____ are subject to restriction and/or election requirement.		
<b>Application Papers</b>		
9) <input type="checkbox"/> The specification is objected to by the Examiner.		
10) <input type="checkbox"/> The drawing(s) filed on _____ is/are a) <input type="checkbox"/> accepted or b) <input type="checkbox"/> objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
11) <input type="checkbox"/> The proposed drawing correction filed on _____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.		
12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner.		
<b>Priority under 35 U.S.C. §§ 119 and 120</b>		
13) <input checked="" type="checkbox"/> Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) <input checked="" type="checkbox"/> All b) <input type="checkbox"/> Some* c) <input type="checkbox"/> None of: 1. <input checked="" type="checkbox"/> Certified copies of the priority documents have been received. 2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____. 3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received.		
14) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). a) <input type="checkbox"/> The translation of the foreign language provisional application has been received.		
15) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
<b>Attachment(s)</b>		
1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)      4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____		
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)      5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)		
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____      6) <input type="checkbox"/> Other: _____		

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## **DETAILED ACTION**

### ***Claim Rejections - 35 U.S.C. § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13, 15-17 and 21 are rejected under 35 USC §102(b). This rejection is set forth in the prior Office action paper number 5.

### ***Claim Rejections - 35 U.S.C. § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 18-20 and 22-23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nagarajan et al., EP 0 805 234 A2

Nagarajan et al. teach a process of making paper in which a cationic organic polymer containing an aromatic group, same as the one claimed, is added to a papermaking pulp along with an anionic inorganic particle(s), such as bentonite or silica sol, see abstract. The monomers conforming the cationic additives, shown by the reference, are the same as claimed, see abstract

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and pages 4-5. Even though Nagarajan et al. are silent regarding the amount of fresh water introduced into the system, optimizing result effective variables is within the level of ordinary skill in the art, absent a showing of unexpected results. One of ordinary skill in the art would recognize that in highly closed systems as it is the papermaking operation, the amount of fresh and recirculated water need to be optimized to obtain the best paper with the most economical benefits, (tradeoff).

4. Claims 18-20 and 22-23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Pearson, US Patent No. 5,466,338.

Pearson teaches the use of dispersion of polymers for coated broke treatment. The polymers disclosed by Pearson are the same ones used in the present invention and therefore, it would be expected the same increase of the strength of the web, since the addition amounts are within the ranges disclosed in the specification of the claimed invention, see abstract and column 4, line 59 through column 5, line 25. Even though Pearson is silent with respect to the amount of fresh water introduced into the system, optimizing result effective variables is within the level of ordinary skill in the art, absent a showing of unexpected results. One of ordinary skill in the art would recognize that in highly closed systems as it is the papermaking operation, the amount of fresh and recirculated water need to be optimized to obtain the best paper with the most economical benefits, (tradeoff). Note also that the amount of water used will depend of the type of process, i.e., in hand made sheets or in batch processes the amount of water per ton of

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paper is less than 30 tons/ton of paper produced and therefore, those claims are anticipated or at least obvious over those process in which Pearson technique is used.

***Response to Arguments***

5. Applicant's arguments filed on May 30, 2002 have been fully considered but they are not persuasive.

Applicants argue that by the time of the invention highly closed system were not usual, see page 3, first paragraph. This is not convincing in view of evidenced presented in the PTO form 892, i.e., In view of Jonsson, Panchappakesan, Guss and US Patent No. 6,071,380. Therefore, the declaration under 37 C. F. R. 1.132 is not convincing.

Regarding claims 1-13, 15-17 and 21, applicants argue that Nagarajan et al. do not anticipate the invention because they do not teach the suspension having multivalent cations of at least 200 ppm and the conductivity claimed. Also that there does not exits a relationship between the conductivity and the amount of univalent and multivalent ions. This is not convincing because the evidence reference, Scatterfield et al., shows that nowadays the all or at least most of the papermaking pulps have conductivity and uni-multivalent ions within the claimed range and therefore, the teaching Nagarajan et al. inherently meets the criteria of the claims. Note that even there is no relationship between the two variables, the pulps have values within the claimed range, i.e., 10 mS/cm, 3320 ppm of Na<sup>+</sup> and 4.5 mS/cm, 2800 ppm Na<sup>+</sup> are within the claimed range. Scatterfield et al. clearly show that in closed systems, as they are now days, the conductivity and ions of the pulp are within the claimed range.

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Applicants also argue that Nagarajan et al. teach away from the use of the aromatic containing polymers since they teach that the polymers having non-aromatic groups perform better than the polymers having aromatic groups. This is also unconvincing, because that does not proof that the polymers containing aromatic groups do not work, just that the other is a preferred embodiment. Note that it has been held that obviousness may exist although teachings relied upon may be disclosed in the art as non-preferred or unsatisfactory for the intended purpose. *In re Boe*, 53 CCPA 1079; 355 F2d 961; 158 USPQ 507. *In re Smith*, 32 CCPA 959; 148 F2d 351; 65 USPQ 157. *In re Nehrenberg*, 47 CCPA 1159; 280 F2d 161; 126 USPQ 383. *In re Watanabe*, 50 CCPA 1175; 315 F2d 924; 137 USPQ 350.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to José Fortuna, whose telephone number is (703)305-7498. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin, can be reached on (703)308-1164. The fax number for this group is (703)305-7115.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-0661.

When filing a FAX in group 1730, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

José A. Fortuna  
April 7, 2003

  
JOSE FORTUNA  
PRIMARY EXAMINER  
ART UNIT 1731